DOCUMENT RESUME

ED 348 451 UD 028 822

AUTHOR Levitt, Mary J.; And Others
TITLE Stressful Life Events, Social Support, and Achievement: A Study of Three Grade Levels in a Multicultural Environment.
PUB DATE Apr 92
NOTE 22p.; Paper presented at the Annual Meeting of the American Educational Research Association (San Francisco, CA, April 20-24, 1992).
PUB TYPE Reports - Evaluative/Feasibility (142) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Academic Achievement; Adolescents; Age Differences; Black Students; Children; Coping; Elementary Education; *Elementary School Students; *Junior High School Students; Latin Americans; Racial Differences; *Social Support Groups; *Stress Variables; *Urban Schools; White Students

ABSTRACT

This study assessed the extent to which support exerts direct or indirect effects on child and adolescent achievement (grade point average and Statistical Aptitude Test scores). Personal interviews were conducted with 120 African American, 101 Anglo-European American, and 112 Latin American students (151 males and 182 females) in grades 1-2, grades 4-5, and grades 8-9 from a multiethnic public school population. Interviews included measures of social support, life stress, loneliness, and self-concept. Forty-nine students were reinterviewed after 1 to 2 weeks to establish the social support measures' test-retest reliability. Support was related to achievement directly and indirectly in relation to loneliness and self-concept, but specific effects varied by age and ethnicity. Support effects were stronger with age and stress effects declined with age, suggesting increased ability to use support resources in coping with stress. Some ethnic group variation may be related to the significance of differential sources of support. Further research is needed to validate these results and explore proximal determinants of ethnic group differences. Included are 19 references, 5 tables, and 1 figure. (RLC)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED348451

Stressful Life Events, Social Support, and Achievement: A Study of Three Grade Levels in a Multicultural Environment

Mary J. Levitt and Nathalie Guacci

Florida International University

and

Jerome L. Levitt

Office of Educational Accountability

Dade County Public Schools

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

X This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
M. Levitt
Florida Int. U.
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Paper presented at the meeting of the American Educational Research Association, San Francisco, April, 1992. The authors thank the staff and students at Oak Grove and North Miami Elementary Schools, North Miami Middle School, Sinai Academy, and the FIU Child Development Center for their participation in this study. We also acknowledge the assistance of Sonya Ballard, Dalia Biller, Stacey Blaze, Sherry Feiner, Ruth Gammon, Claudia Lang, Joan Lake, Michelle McCauley, and Shelley Rosenberger. We especially thank Marcia Silver and Susan Williams for their contributions to the project.
Correspondence should be addressed to Mary Levitt, Department of Psychology, Florida International University, North Miami, FL 33181.

UD028422

BEST COPY AVAILABLE

Abstract

Supportive relationships are known to contribute to personal functioning in adult life, but much less is known about the effects of social support in childhood. In research with adults, support has been found to affect personal outcomes both directly and indirectly, either by interacting with stress, or by enhancing self-appraisal. The extent to which support exerted direct or indirect effects on child and adolescent achievement (grade point averages and SAT scores) was explored in this study of children at three grade levels (1-2, 4-5, and 8-9) from a multi-ethnic public school population. Personal interviews were conducted with 333 African-American, Anglo/European-American, and Latin-American students. Measures of social support, life stress, loneliness, and self-concept were included in the interview. Support was related to achievement both directly and indirectly in relation to loneliness and self-concept, but specific effects varied by age and ethnicity. Support effects were stronger with age, and stress effects declined, suggesting increased ability to utilize support resources in coping with stress. Some ethnic group variation may be related to the significance of differential sources of support. Further research is needed to validate the present results and to explore the proximal determinants of ethnic group differences.

Stressful Life Events, Social Support, and Achievement:

A Study of Three Grade Levels in a Multicultural Environment

Numerous studies of adult populations have found that personal functioning diminishes under an accumulation of major life stressors, whereas the availability of a network of supportive relationships contributes positively to well-being (Cohen & Wills, 1985). However, much less is known about the effects of social support in childhood. In research with adults, support has been found sometimes to have direct effects on personal functioning, independent of the effects of life stress; other studies have found that support interacts with stress, exhibiting a buffering effect under high stress conditions (Cohen & Wills, 1985). Furthermore, it has been suggested that support may affect personal outcomes indirectly by enhancing the individual's self-appraisal (Antonucci & Jackson, 1987; Dubow, Tisak, Causey, Hryshdo, & Reid, 1991). The extent to which support exerted direct or indirect effects on child and adolescent achievement, in the context of stress, was explored in this study.

Researchers have begun to study children's social networks (Belle, 1989), and some reports have emerged with regard to the role of stress and support as predictors of self-concept and achievement. Relations between support and self-esteem have been reported for African-American (Coates, 1985) and Israeli (Hoffman, Ushpiz, & Levy-Shiff, 1988) adolescents. Dubow and his colleagues (Dubow et al., 1991) collected longitudinal data on a predominantly white middle class sample of students who completed questionnaires when they were first in Grades 3 to 5, and again two years later. Stressful life events were related negatively to GPA, and support was related positively to GPA at both time periods, but only support predicted achievement over time. Although

self-concept was not measured, the support measure was essentially an index of self-esteem support.

Few studies of social support in childhood and adolescence have included multi-ethnic samples. In an exception to this trend, Cauce, Feiner, and Primavera (1982) studied the effects of support on self-concept and achievement in a highly stressed sample of inner city adolescents from African-American, Latin-American, and Anglo/European populations. Family support was related positively to academic self-concept, except for African-American female students. However, support from family or formal sources was not related to GPA. In a finding that illustrates the complexity of support effects, support from peers and nonfamilial adults was associated with lower grades.

Collectively, previous studies suggest that social support is related to self-concept and achievement in late childhood and adolescence, but no clear pattern of effects has emerged from these investigations. In part, the inconsistency of prior findings may reflect a lack of consensus regarding the conceptualization and measurement of social support (Wolchik, Beals, & Sandler, 1989). Also, a wide divergence of samples makes comparisons of results difficult. A further limitation of past research is a lack of data regarding support effects for young children.

In the present study, we sought to contribute to the emergent literature on social support and school achievement by providing data from children across a broad age spectrum from a multicultural community. The specific aims of this study were to assess the relations between social support, academic self-concept, and achievement at three grade levels (1-2, 4-5, and 8-9), and to assess the replicability of these findings within cultural groupings.

The conceptual and methodological framework for the research was provided by the developmental Convoy Model of social support (Kahn &

Antonucci, 1980). This model specifies that the social network can be conceptualized as a dynamic, hierarchically organized protective convoy of relationships that provide affective, instrumental, and self-affirming support across the life span. Changes in the structure and supportive function of the convoy are expected to occur as a result of normative developmental changes or in response to major life events. Thus, in the present study, it was anticipated that support effects would not be uniform across age levels.

Empirically, the convoy is defined as a series of concentric circles onto which individuals map their social relations, with the most significant relations occupying the inner circle of the convoy. Support information is obtained by asking the individual to indicate persons in the convoy who provide each of several support functions. This procedure avoids demand characteristics that are present when persons are asked directly to indicate whether they receive support from specific relations. The convoy mapping procedure, used extensively with adults (Antonucci, 1986), was modified for use with children in the present study.

Method

Sample

Personal interviews were conducted with 333 African-American, Latin-American, and Anglo/European-American public school students in Grades 1-2, 4-5, and 8-9. Of these, 49 were reinterviewed one to two weeks after the initial interview to establish test-retest reliability of the social support measures. The sample consisted of students returning parental consent forms at one middle school and two elementary schools in the feeder pattern of the middle school. The schools were located in a metropolitan area with residents of lower-middle to middle socioeconomic status. The distribution of students by age, gender, and ethnicity is presented in Table 1. There were no

significant differences between ethnic groups with regard to parental work status or father absence; 94% of fathers and 80% of mothers were employed at all grade levels; fathers of adolescents were more likely (53%) to be absent from the home than were fathers of children in Grades 1-2 (32%) or 4-5 (39%), $X^2(2) = 10.26$, $p < .006$.

Procedure and Measures

Interviews were conducted individually at school by one of nine interviewers matched to the child according to cultural background. Grade reports and Stanford Achievement Test scores were obtained from student records. Reading and math grades were combined, as were reading and math Stanford scores, to yield GPA and SAT achievement indices. Specific measures included in the interview were (a) the modified convoy mapping procedure, (b) a scale of stressful life events for children (Antonucci, 1990), (c) the children's Loneliness Scale (Asher, Hymel, & Renshaw, 1984), and (d) the Harter (1985) Self-Concept Scale.

Convoy mapping procedure. The convoy mapping diagram is illustrated in Figure 1. The students' names were initially written on a 3/4 in. circular sticker and placed in the center of the diagram. Students were then told that the inner circle of the diagram was for those persons "who are the most close and important to them--those who love them the most and whom they love the most." The middle and outer circles were to include those who were "still important," but not as much as those in the inner circle. The name of each person nominated by the student was written on a sticker and placed in the diagram, beginning with the inner circle. The student was then asked to indicate persons in the diagram who provided each of six emotional, instrumental, and self-affirming support functions. Specifically, students were asked to indicate persons to whom they talk about important things, who make them feel better when something bothers them or they are unsure about

something, who would take care of them if they were sick, who help them with their homework or other school work, who like to be with them, and who make them feel good about themselves.

The principal analyses for the present report were based on a summary index of network support, consisting of the total number of support functions provided to the child by individuals in the child's network. Information regarding specific sources of support was also obtained. For the present analyses, these included family versus friend support in general, and support from mother and father in particular. Internal consistency (alpha) reliabilities for the sample ranged from .69 for support from mother to .85 for total network support, with a mean of .78. Comparable figures were obtained at each grade level.

Stressful Life Events, Loneliness, and Self-Concept Measures. The life events scale assessed whether the child had experienced any of several major stressors, such as serious illness or death of a family member, parental divorce, or a major move, within the past year. Loneliness was assessed for all students, with reliabilities (alpha) of .71 at Grade 1-2, .81 at Grades 4-5, and .81 at Grades 8-9. Note, however, that the Loneliness measure employs a 3-point response scale at Grades 1-2, and a 5-point scale at Grades 4 and above, so that means for younger and older children are not comparable. Self-concept was assessed only for grades 4-9, as Harter (1989) has indicated that self-concept measures are not reliable at Grades 1-2. As the focus of this study was on academic achievement, the analyses were based on the Cognitive Self-Concept subscale of the Harter (1985) measure. Alpha reliabilities were .75 at Grades 4-5, and .78 at Grades 8-9.

Results and Conclusions

Test-Retest Reliability

The test-retest reliabilities of all measures derived from the modified convoy mapping procedure were assessed by computing intraclass correlations for each measure at each grade level. Intraclass correlations correct for chance associations, and are more conservative than Pearson coefficients. Based on criteria suggested by Fleiss (1981), the measures evidenced good to excellent reliability at all grade levels. The specific coefficients are contained in a separate report (Levitt, Guacci, & Levitt, 1992) available from the authors.

Comparisons of Predictor Variables by Grade Level and Ethnicity

Analyses of variance were conducted initially to determine whether there were differences by gender, grade level, or ethnicity on any of the predictor measures. Square root transformations were performed on the support measures to correct for skewness. As can be seen in Table 2, there were increases across grade levels in the amount of support received from the network, with no differences by ethnicity. Age groups did not differ with regard to number of stressful events, but African-American children at all grade levels reported a higher number of stressors. Loneliness and cognitive self-concept did not differ by grade or ethnicity. There were no significant gender effects in these analyses.

Stress, Support, Self-Appraisal, and Achievement

The extent to which stressful events and network support were related to achievement at each grade level, and the potential mediating role of self-concept, were explored in a series of hierarchical regression analyses. The regression results are presented in Table 3. In the initial series of analyses, loneliness and self-concept were the criterion measures. Gender and ethnicity were entered first as control variables, followed by stress, network

support, and multiplicative indices representing the interaction of support and stress. In the next phase, GPA and SAT scores were the criteria. Loneliness or self-concept were entered as predictors subsequent to the stress and support measures. The Stress X Support interaction terms were not significant, and were dropped from the analyses. The lack of significant interaction effects suggests that support did not play a moderating or buffering role with regard to the effects of stress in this study.

The overall pattern of results suggests that network support plays an increasingly important role with age. In grades 1-2, network support was unrelated to the criterion measures. In grades 4-5, support appears to be related indirectly to achievement; that is, support was related to cognitive self-concept and self-concept was related to achievement. In grades 8-9, support was related both directly and indirectly to SAT scores. As support effects emerged, stress effects declined in prominence by adolescence. This general pattern may reflect an increased ability at adolescence to utilize extended support resources in coping with stress. Although loneliness was related significantly to GPA for the youngest children, loneliness was not related to achievement for older students.

Subsequent analyses addressed the extent to which the primary findings held within ethnic subgroups. The results of these analyses are presented in Table 4. Given the general weakness of loneliness effects at Grades 4 and above, analyses of loneliness by ethnicity are not reported here for the sake of clarity. The overall pattern appears to hold within ethnic subgroups. However, there was sufficient variation to suggest caution in generalizing results obtained from homogeneous samples to culturally divergent children. The relations of stress, loneliness, and GPA in Grades 1-2 held principally for African-American and Anglo/European-American children, and stress was

related directly to both GPA and SAT scores for African-American children. Perhaps these findings reflect higher levels of stress for the nonLatin children. Latin-American children reported the fewest number of stressful events at this age (Table 2).

On the other hand, in Grades 4-5, stress effects were weaker for African-American students. In fact, support and self-concept effects were also weaker for this group, compared to Anglo/European and Latin students. However, the link between self-concept and SAT scores held for all groups at this age.

The general finding of a reduction in stress effects for students in Grades 8-9 also held across ethnic groups. However, the relations of support to self-concept and SAT scores that were found for the total sample of 8th and 9th graders were not significant for the Anglo/European group, although the beta coefficients were sufficiently high to negate a conclusion that support had no effect for Anglo/European students. Academic self-concept was related significantly to the achievement measures, except for the SAT scores of Anglo/European-American students.

Family Versus Friend Support

Past research has suggested that support effects may vary depending on the specific source of the support (Cauce, et al., 1982), perhaps accounting for some discrepancies across ethnic groups. The correlations of support from family members versus friends with the criterion measures are presented in Table 5, by ethnicity and for the sample as a whole. The family support index includes support from parents and all other relatives. Parent effects were also analyzed individually, given the likely importance of parental support.

Although support was not generally related to achievement in Grades 1-2, support from the father did show some relation to the achievement measures. Family support was related to achievement for younger Latin-American students,

and African-American students with higher parental support were less lonely at this age.

Family support in general and maternal support in particular were related to cognitive self-concept for Anglo/European- and Latin-American students in Grades 4-5 and family support was related directly to SAT scores for Latin-American students at this grade level. Support from friends was associated with achievement for Anglo/European-American students.

In Grades 8-9, family support was related to self-concept, with the strongest effect appearing for the African-American group. Maternal support was significant in relation to both self-concept and SAT scores for Latin-American students. Anglo/European-American students receiving more support from fathers had more positive self-concepts, but support from fathers was related negatively to SAT scores for African-American students. Support from friends was related significantly to SAT scores for all but the Latin-American students.

Given the scattered nature of these findings, it is difficult to generalize about the effects of support from family versus friends. Prior analyses with this sample (Levitt, Guacci, & Levitt, 1992) indicate that support from friends increases in magnitude at adolescence. The current findings suggest that, excepting Latin-American students, support from friends is salient for some aspects of achievement at this age (and earlier for Anglo/European students). Perhaps this finding reflects increased collaboration between peers with regard to academic pursuits. Family support may be more relevant to the achievement of Latin-Americans because these students were less acculturated to American peer-oriented values. Academic self-concept appears to be related more to family than to friend support across age and ethnicity.

In general, it appears that support is predictive of both self-appraisal and achievement, but specific effects vary by age and ethnicity. These results must be interpreted with caution for a number of reasons. Age effects are based on cross-sectional data, and longitudinal study is needed to verify that these effects represent developmental changes. Longitudinal data are also needed to validate the direction of effects in these analyses. Theoretically, it is proposed that support exerts both direct effects on achievement and indirect effects through the enhancement of self-appraisal, and the present data are consistent with this premise. It is possible, however, that persons with higher achievement and/or more positive self-concepts elicit more support. Similar caveats apply to the interpretation of stress effects. In fact, Dubow et al. (1991) have reported that stress did not predict achievement longitudinally, although contemporaneous measures of stress and achievement were related.

Caution is also required with regard to the interpretation of ethnic group differences. Ethnicity is a global characteristic that may reflect some cultural variation, but the heterogeneity of individuals within ethnic groups precludes drawing simplistic conclusions based solely on group comparisons (McLoyd, 1990; Wilson, 1986). As Jackson and his colleagues have noted, findings of ethnic differences require more intensive study to determine the proximal variables contributing to the observed differences (Jackson, Antonucci, & Gibson, 1990).

Although individual differences were not the focus of this study, the results suggest considerable heterogeneity with regard to the effects of support from different sources. One advantage of the convoy mapping procedure is that it enables researchers and interventionists to obtain a comprehensive picture of the child's social network, and to assess the relative importance of various network persons to the child. However, further research is needed

regarding the normative development of social networks and support processes before the significance of individual variation can be fully understood.

In sum, the present study provides basic data on stress and support in relation to achievement across a broad age range in a multi-ethnic population. The results contribute to a growing body of literature indicating the importance of social factors to school performance. Additional research is needed, however, to understand how support processes operate within and across divergent cultures to affect achievement. Hopefully, information regarding specific patterns of support-achievement relations by age and culture may ultimately be used to identify children at risk academically because they lack adequate support, and to facilitate interventions designed to minimize educational failure by enhancing the child's social resources.

References

Antonucci, T. C. (1990). Children's life events measure developed for the project, "Social relations through the life course." Ann Arbor: University of Michigan, Institute for Social Research.

Antonucci, T. C. (1986). Social support networks: A hierarchical mapping technique. Generations, Summer, 10-12.

Antonucci, T. C., & Jackson, J. S. (1987). Social support, personal efficacy, and health. In L. Carstensen & B. A. Edelstein (Eds.), Handbook of clinical gerontology (pp. 291-311). New York: Pergamon.

Asher, S. R., Hymel, S., & Renshaw, P. D. (1984). Loneliness in children. Child Development, 55, 1459-1464.

Belle, D. (Ed.) (1989). Children's social networks and social supports. New York: Wiley.

Cauce, A. M., Feiner, R. D., & Primavera, J. (1982). Social support in high-risk adolescents: Structural components and adaptive impact. American Journal of Community Psychology, 10, 417-428.

Coates, D. (1985). Relationships between self-concept measures and social network characteristics for Black adolescents. Journal of Early Adolescence, 5, 319-338.

Cohen, S., & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. Psychological Bulletin, 98, 310-357.

Dubow, E. F., Tisak, J., Causey, D., Hryshko, A., & Reid, G. (1991). A two-year longitudinal study of stressful life events, social support, and social problem solving skills: Contributions to children's behavioral and academic adjustment. Child Development, 62, 583-599.

Fleiss, J. L. (1981). Statistical methods for rates and proportions (2nd ed.). New York: Wiley.

Harter, S. (1985). Manual for the Self-Perception Profile for Children. Denver, CO: University of Denver.

Harter, S. (1989). Personal communication.

Hoffman, M. A., Ushpiz, V., & Levy-Schiff, R. (1988). Social support and self-esteem in adolescence. Journal of Youth and Adolescence, 17, 307-316.

Jackson, J. S., Antonucci, T. C., & Gibson, R. C. (1990). Cultural, racial, and ethnic minority influences on aging. In J. E. Birren, & K. W. Schaie (Eds.), Handbook of the psychology of aging (3rd ed.) (pp. 103-123). New York: Academic Press.

Kahn, R. L., & Antonucci, T. C. (1980). Convoys over the life course: Attachment, roles and social support. In P. Baltes, & O. Brim (Eds.), Life span development and behavior (Vol. 3) (pp. 253-286). New York: Academic Press.

Levitt, M. J., Guacci, N., & Levitt, J. L. (1992). Convoys of social support in childhood and early adolescence: Structure and function. Unpublished manuscript. N. Miami, FL: Florida International University.

McLoyd, V. C. (1990). Minority children: Introduction to the special issue. Child Development, 61, 263-266.

Wilson, M. N. (1986). The Black extended family: An analytical consideration. Developmental Psychology, 22, 246-258.

Wolchik, S. A., Beals, J., & Sandler, I. N. (1989). Mapping children's support networks: Conceptual and methodological issues. In Belle, D. (Ed.), Children's social networks and social supports (pp. 191-220). New York: Wiley.

Table 1

Composition of sample by age, gender, and ethnicity

	Age 7	Age 10	Age 14	Total
African-American				
Male	14	19	14	47
Female	26	22	25	73
Anglo/Eur.-American				
Male	24	14	13	51
Female	16	15	19	50
Latin-American				
Male	13	22	18	53
Female	23	17	19	59
Total	116	109	108	333

Table 2

Means for predictors by grade level and ethnicity.

	Grade 1-2			Grade 4-5			Grade 8-9			Effects		
Variable	Af	An	La	Af	An	La	Af	An	La	G	E	GxE
Stress	3.2	3.1	2.5	3.3	2.7	2.5	3.0	2.6	2.1		*	
Support[a]	4.1	3.6	3.7	4.3	4.8	4.3	4.5	4.6	4.6	*		
Loneliness[b]	1.4	1.5	1.4	1.9	2.0	2.0	2.2	1.9	2.0			
Self-Concept	--	--	--	2.8	2.8	2.8	2.8	2.9	2.7			

[a]Transformed network support measure. [b]Scores at Grades 1-2 are not comparable.

Table 3

Stress, support, self-appraisal, and achievement.

Grade/ Criterion	Predictor Variable: Stress beta	Stress (r^2)	Support beta	Support (r^2)	Loneliness beta	Loneliness (r^2)	Self-Concept beta	Self-Concept (r^2)
Grade 1-2								
Loneliness	.29*	(.08)	-.08	(.01)	--	--	--	--
GPA	-.15	(.02)	.04	(.00)	-.27*	(.07)	--	--
SAT	-.09	(.01)	.05	(.00)	-.18	(.03)	--	--
Grade 4-5								
Loneliness	.05	(.00)	-.06	(.00)	--	--	--	--
Self-Concept	-.17	(.03)	.34**	(.11)	--	--	--	--
GPA	-.30**	(.08)	.08	(.01)	-.12	(.01)	.37**	(.11)
SAT	-.28**	(.07)	.13	(.02)	-.07	(.01)	.43**	(.16)
Grade 8-9								
Loneliness	.10	(.01)	-.25**	(.06)	--	--	--	--
Self-Concept	-.19	(.03)	.33**	(.11)	--	--	--	--
GPA	-.16	(.02)	.15	(.02)	.02	(.00)	.39**	(.13)
SAT	.01	(.00)	.34**	(.11)	-.11	(.01)	.33**	(.09)

Note. GPA = combined reading and math grades; SAT = Stanford Achievement Test Scale Scores (reading, math combined).

*$p < .05$; **$p < .01$ or less.

Table 4

Stress, support, self-appraisal, and achievement by ethnicity.

	Predictor Variable								
	Stress			Support			G1-2 Lonely/G4-9 Self		
Grade/ Criterion	Af	An	La	Af	An	La	Af	An	La
Grade 1-2									
Loneliness	.25*	.39**	.13	-.13	.11	-.17	--	--	--
GPA	-.32**	-.17	.07	-.08	-.06	.18	-.40**	-.41**	-.07
SAT	-.26*	-.08	.05	-.24*	-.02	.30*	-.17	-.22	-.22
Grade 4-5									
Self	.12	-.24	-.21	.17	.53**	.40**	--	--	--
GPA	-.22	-.44**	-.26*	.07	.18	.14	.07	.51**	.55**
SAT	-.22	-.46**	-.29*	.03	.21	.29*	.44**	.40**	.45**
Grade 8-9									
Self	-.20	-.24	-.05	.45**	.20	.44**	--	--	--
GPA	-.21	-.15	-.07	.25*	-.01	.21	.35*	.32*	.46**
SAT	-.18	.14	.08	.46**	.21	.49**	.47**	.19	.42**

Note. Af = African-, An = Anglo/European-, La = Latin-American. Numbers are standardized beta weights.

*$p < .10$; **$p < .05$ or less.

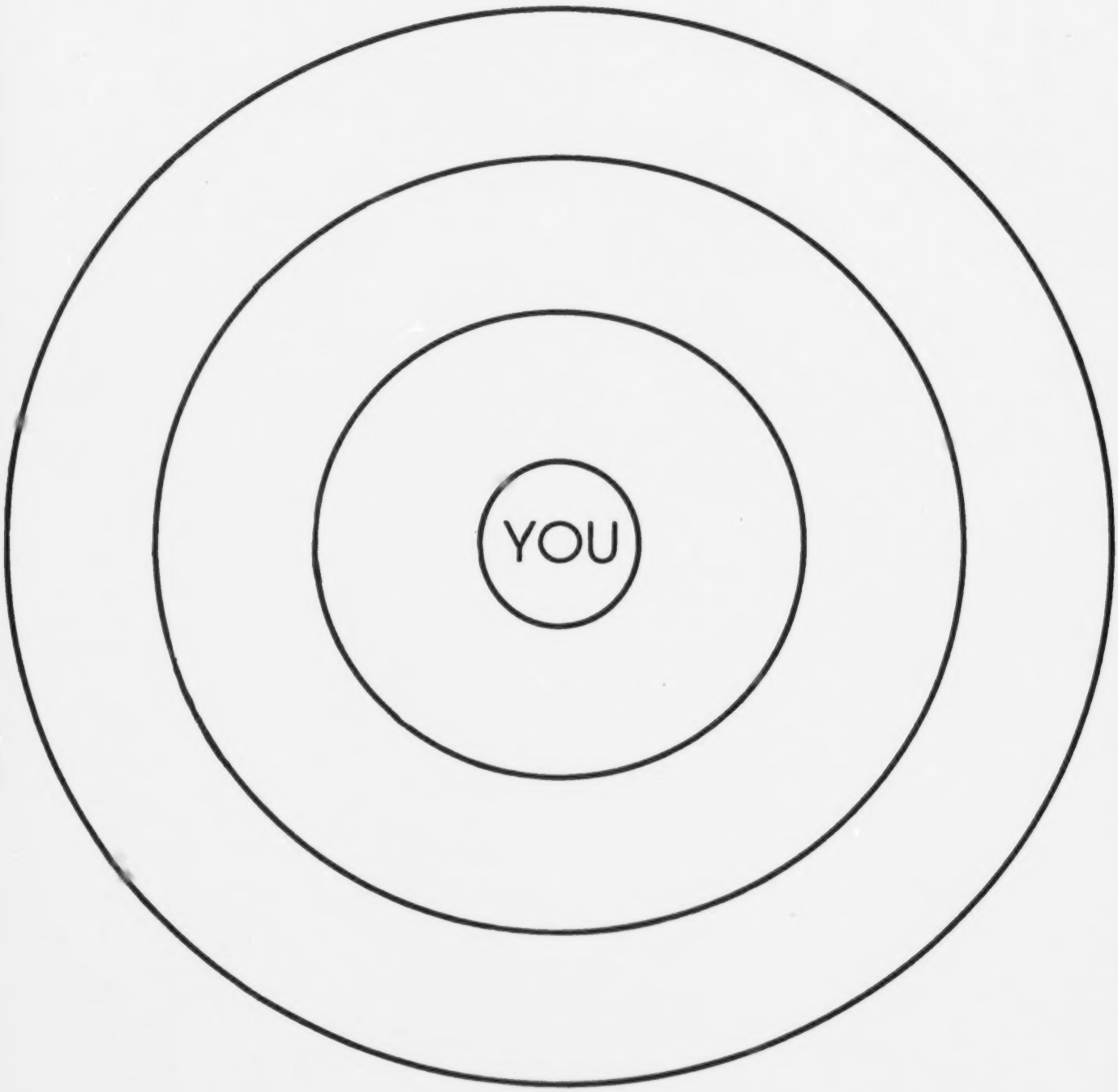
Table 5

Support from different sources and achievement.

Grade/ Source	G1-2 Lonely Af	G1-2 Lonely An	G1-2 Lonely La	G1-2 Lonely T	G4-9 Self Af	G4-9 Self An	G4-9 Self La	G4-9 Self T	GPA Af	GPA An	GPA La	GPA T
Grade 1-2												
Family	-.35**	.14	.00	-.10	-.12	-.09	.35**	.02	-.13	.10	.39**	.09
Mother	-.29*	-.10	.02	-.13	-.06	-.18	.13	.03	-.06	.01	.24	.11
Father	-.31*	-.23	.14	-.15	.31*	.22	.20	.29**	.19	.25	.25	.26**
Friends	.26	-.12	-.25	.01	.03	-.10	.21	.01	-.15	.12	.09	-.01
Grade 4-5												
Family	.01	.54**	.47**	.29**	.03	.00	.23	.09	-.09	.03	.30*	.15
Mother	-.13	.47**	.38**	.19	.06	.10	.21	.14	-.12	.04	.19	.09
Father	-.07	.18	.16	.07	-.05	.20	.26	.15	-.20	.20	.08	.10
Friends	.20	.26	-.01	.14	.25	.39**	-.14	.14	.23	.31*	-.03	.15
Grade 8-9												
Family	.42**	.21	.28*	.28**	.19	.06	.15	.14	.22	.16	.23	.18*
Mother	.16	.27	.33**	.24**	.01	.15	.25	.15	.06	.18	.31*	.24**
Father	.04	.32*	.07	.15	-.23	.23	.09	.10	-.38**	.23	.25	.10
Friends	.11	-.04	.13	.08	.10	.03	.06	.06	.36**	.49**	.17	.30**

Note. Af = African-, An = Anglo/European-, La = Latin-American, T = Total sample. Numbers are Pearson correlation coefficients.

*$p < .10$; **$p < .05$ or less.


YOU